DEPARTMENT OF THE INTERIOR

Bureau of Ocean Energy Management

[Docket No. BOEM-2023-0033]

Draft Wind Energy Areas – Commercial Leasing for Wind Power Development on the Oregon Outer Continental Shelf (OCS)

AGENCY: Bureau of Ocean Energy Management (BOEM), Interior.

ACTION: Draft Wind Energy Areas; request for comments.

SUMMARY: This Draft Wind Energy Area (WEA) notice (the notice) invites public comment on the Draft WEAs on the OCS offshore the Oregon coast. BOEM will consider information received in response to this notice to identify Final WEAs as part of the Area Identification (Area ID) process. Those interested in providing comments and information regarding site conditions, resources, and multiple uses in close proximity to or within the Draft WEAs should provide the information requested in section 9, which is entitled, "Requested Information from Interested or Affected Parties." BOEM may or may not offer a lease for a commercial offshore wind energy project within the Draft WEAs after further government consultations, public participation, and environmental analyses.

DATES: Submit your comments on the Draft WEAs by October 16, 2023. Late submissions may not be considered.

ADDRESSES: Please submit comments and information by either of the following two methods:

1. Federal eRulemaking Portal: http://www.regulations.gov. In the search box at the top of the webpage, enter BOEM-2023-0033 and then click "search." Follow the instructions to submit public comments and to view supporting and related materials.

2. U.S. Postal Service or other mail delivery service. Send your comments and other information to the following address: Jean Thurston-Keller, Bureau of Ocean Energy Management, Pacific Regional Office – Renewable Energy Section, 760 Paseo Camarillo, Suite 102 (CM 102), CA 90101.

FOR FURTHER INFORMATION CONTACT: Jean Thurston-Keller, Project Coordinator, Bureau of Ocean Energy Management, Pacific Regional Office – Renewable Energy Section, 760 Paseo Camarillo, Suite 102 (CM 102), Camarillo, CA 90101, Jean.Thurston-Keller@boem.gov

SUPPLEMENTARY INFORMATION

1. Authority

This notice of Draft WEAs is published under subsection 8(p)(3) of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. 1337(p)(3), and its implementing regulation at 30 CFR 585.211.

2. Purpose

This notice invites public comment on the Draft WEAs on the OCS offshore the Oregon coast and presents the results of a spatial suitability model developed by the National Oceanic and Atmospheric Administration (NOAA), National Centers for Coastal Ocean Science (NCCOS) and informed by the Bureau of Ocean Energy Management (BOEM), collectively referred to as the Oregon WEA Spatial Modeling Team (Team). The draft BOEM/NCCOS joint report entitled, "A Wind Energy Siting Analysis for the Oregon Call Area" (available at www.boem.gov/renewable-energy/state-activities/Oregon) summarizes the methods and analysis used to develop draft Wind Energy Area Analysis and suitability modeling efforts.

3. Background

BOEM's competitive lease issuance process requires a Call for Information and Nominations (Call), which requests comments from the public about areas of the OCS that should receive consideration and analysis for the potential development of renewable energy (30 C.F.R. § 585.211(a)). A state-wide planning effort may be used to inform the development of a Call. Comments received on the Call are then used to inform the Area ID process.

The Area ID process is a required step under the renewable energy competitive leasing regulations for the identification of areas for environmental analysis and consideration for leasing (30 C.F.R. § 585.211(b)). The Area ID process takes into consideration multiple competing uses and environmental concerns that may be associated with a proposed area's potential for commercial renewable energy development. The development of Draft WEAs and seeking public comment on these areas are not required under BOEM's regulations. However, BOEM incorporated such processes in Oregon for a more transparent and inclusive Area ID process in response to comments requesting additional engagement steps, siting data concerns, and the use of spatial modeling in the development of lease areas.

BOEM prepares an Environmental Assessment (EA), pursuant to the National Environmental Policy Act (NEPA) before any lease sale. The objective of the environmental analysis is to estimate the nature, severity, and duration of impacts that might occur from site assessment (i.e., deployment and installation of a meteorological buoy(s)) and site characterization activities (i.e., biological, archaeological, geological and geotechnical surveys) within the WEAs. Potential impacts of a specific proposed renewable energy facility in the identified areas would be addressed during the review of a Construction and Operations Plan (COP) when project specific data and information are available. Project specific information includes the data and analysis required in the COP, such as: information related to the general project design, and general fabrication and installation methodologies; as well as all cables and pipelines, including cables on project easements; a description of deployment activities; a list of solid and liquid wastes

generated; a listing of chemical products used (if stored volume exceeds Environmental Protection Agency (EPA) reportable quantities); a description of any vessels, vehicles, and aircraft used to support the activities; a general description of the operating procedures and systems; decommissioning and site clearance procedures; geological hazard information; general hazard information; water quality in the project area; biological resources in the project area; sensitive biological resources or habitats in the project area; threatened or endangered species present in the project area; archaeological resources in the project area; and coastal and marine uses.

a. Development of the Draft Call for Information and Nominations

In June 2020, BOEM held a BOEM Oregon Intergovernmental Renewable Energy Task Force (Task Force) meeting to discuss a draft Offshore Wind Energy Data Gathering and Engagement Plan that was distributed to Task Force members in March 2020. Based on feedback, BOEM and the Oregon Department of Land, Conservation and Development (DLCD) finalized and adopted the Data Gathering and Engagement Plan[1] (hereafter 'Plan') in October 2020. The Plan outlined how BOEM and the DLCD would engage with research organizations and potentially interested and affected parties to gather data and information to inform offshore wind energy planning and future leasing decisions offshore Oregon.

The Plan had three goals: to ensure (1) interested and affected parties are informed of the data and information-gathering process for offshore wind planning and have meaningful opportunities to provide input; (2) collection of the best current and available information during a data-gathering phase to inform potential offshore wind planning and any future leasing decisions offshore Oregon; and (3) BOEM and the State of Oregon will build partnerships and a sense of shared ownership in offshore wind energy planning with interested and affected parties.

The Planning Area (Figure 1) described in the Plan included the OCS seaward of Oregon's territorial sea at 3 nautical miles (nm) where energy production from offshore wind was thought to be viable based on the current state of floating offshore wind energy technology. This area included water depths less than 1,300 meters with average wind speeds of at least 7 meters/second or 13.6 knots.

The DLCD, in partnership with BOEM, developed a data catalog and map viewer within the West Coast Ocean Data Portal to provide public access to the data gathered during the Oregon offshore wind planning process. This tool, known as the 'OROWindMap' is an online open source of data from the West Coast Ocean Portal and allows for the inclusion of new data sets, including those gathered during the outreach efforts described below. Additional information on the OROWindMap Tool may be found at: https://offshorewind.westcoastoceans.org.

[1] Data Gathering and Engagement Plan for Offshore Wind Energy in Oregon. October 2020 (www.boem.gov). Last accessed April 11, 2023.

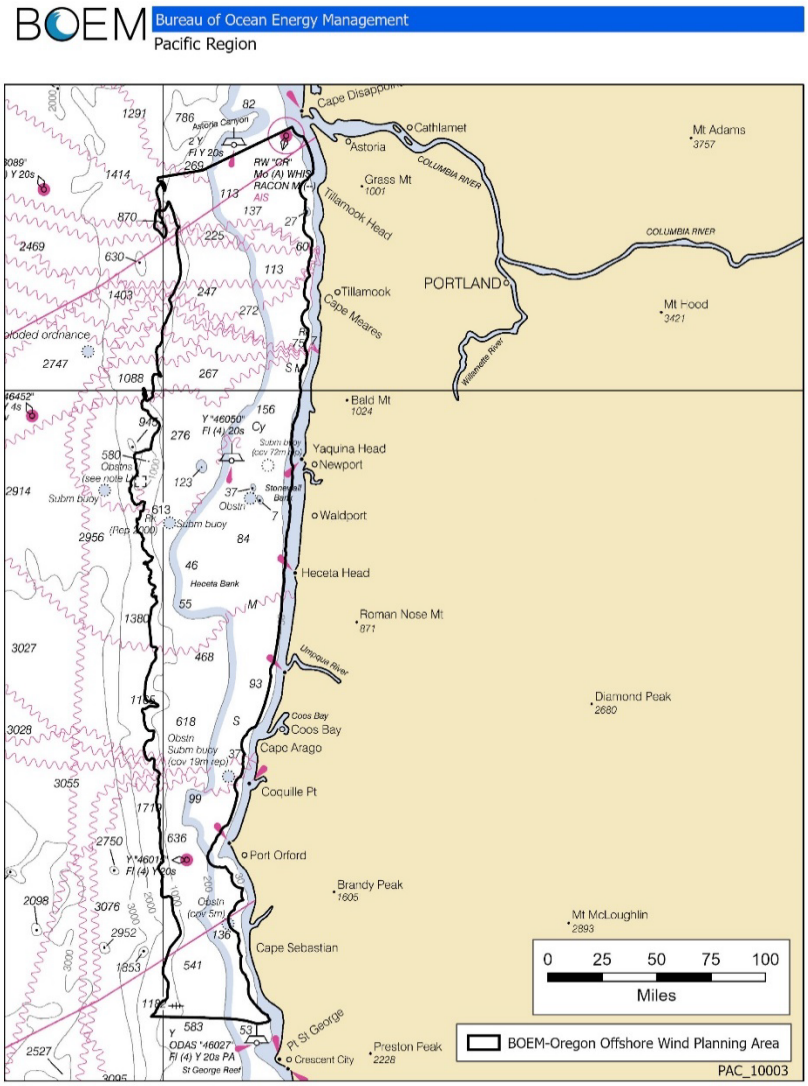

Figure 1: Oregon Planning Area.

Throughout 2021, BOEM and the DLCD hosted a series of outreach meetings geared towards specific stakeholders. More than 75 meetings were held with multiple interested parties including coastal communities, ocean user groups, the wind industry, research and environmental organizations, the general public, elected officials, and Tribal Nations. A Data Gathering and Engagement Summary Report[2] outlines the results of BOEM and DLCD's engagement through 2021. BOEM also hosted six public webinars and workshops in 2021. The webinar recordings and other information are available at https://www.boem.gov/renewable-energy/state-activities/2021-oregon-offshore-wind-energy-planning-public-webinars. BOEM and the DLCD also engaged with multiple community councils, commissions, and other organizations at their standing meetings when possible. Examples include city councils, the Oregon Ocean Policy Advisory Council, the Pacific Fishery Management Council, county boards of commissioners, some of the Oregon Seafood Commodity Commissions, and non-governmental organizations.

[2] Data Gathering and Engagement Report OR OSW Energy Planning January 2022 (boem.gov). Last accessed February 7, 2023.

BOEM reviewed the collected data and incorporated feedback from the aforementioned meetings, webinars and workshops, as well as discussions with the State of Oregon, Federal partners and Tribal nations to delineate three proposed Call Areas offshore Oregon. The proposed Call Areas were delineated with consideration of Oregon's 100% Clean Energy Law, technical suitability for offshore wind development, existing ocean uses, and preliminary wildlife and habitat considerations. In coordination with the State of Oregon, BOEM considered 3 gigawatts of near-term commercial development for the first leasing activities offshore Oregon. The Call Areas were focused offshore the south central and southern Oregon coast where the high wind energy resource would contribute to an estimated lower cost of energy and greater potential for commercial viability. Considerations for suitability for offshore wind development included analysis of existing data on prevailing seafloor conditions such as canyons and slopes, known paleo landforms and existing transmission infrastructure. Considerations for existing uses included using the best available data on commercial fishing activities, maritime navigation, and locations of existing subsea cables to delineate the proposed Call Areas.

Three proposed Call Areas, known as the Coos Bay, Bandon, and Brookings Call Areas (Figure 2), were shared with Task Force members at the February 16, 2022, BOEM Oregon Task Force meeting. BOEM and the DLCD requested feedback on the three proposed Call areas from members and public comment was collected during the meeting. The Bandon Call Area was removed from further consideration at this time after BOEM considered input on potential commercial fishing conflicts and sensitive habitats within the Call Area.

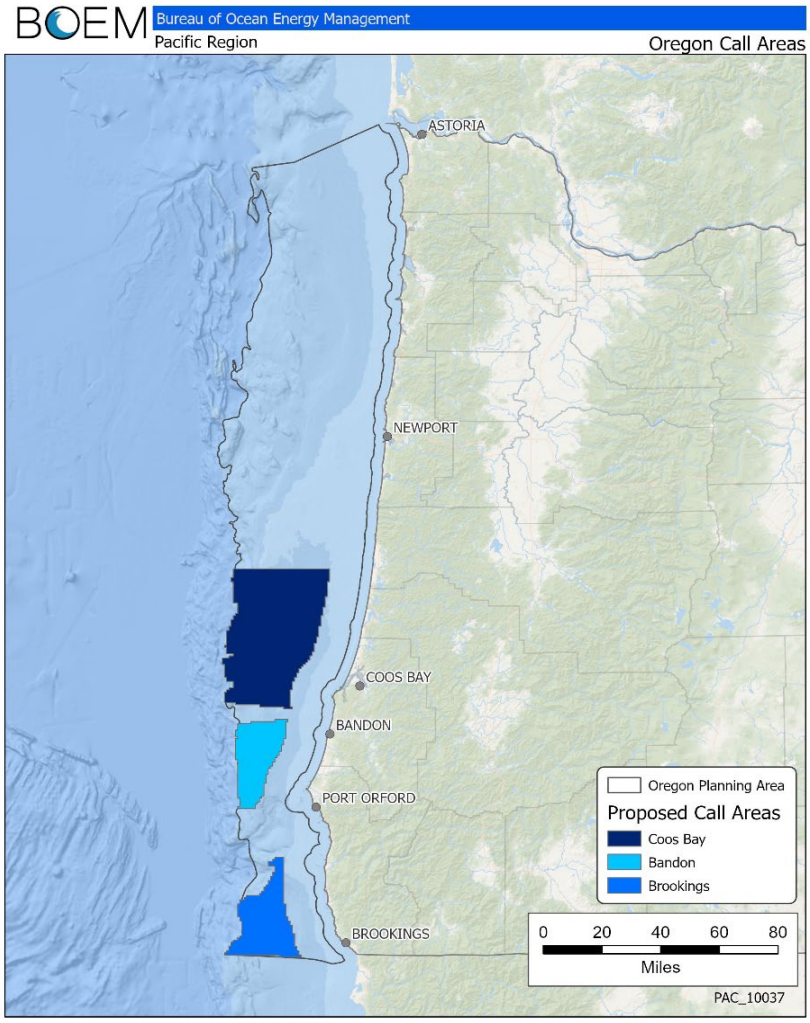

Figure 2: Oregon draft Call for Information and Nominations Areas.

b. Development of the Call for Information and Nominations

BOEM published the Call for Information and Nominations (Call) for the Coos Bay and Brookings Call Areas on April 29, 2022 (Figure 3). The comment period for the Call ended on June 28, 2022. BOEM received 278 comments, which are available at https://www.regulations.gov/docket/BOEM-2022-0009. BOEM received nominations from four wind energy companies, all of which have been legally, technically, and financially qualified. Nominations are available at: https://www.boem.gov/renewable-energy/state-activities/Oregon.

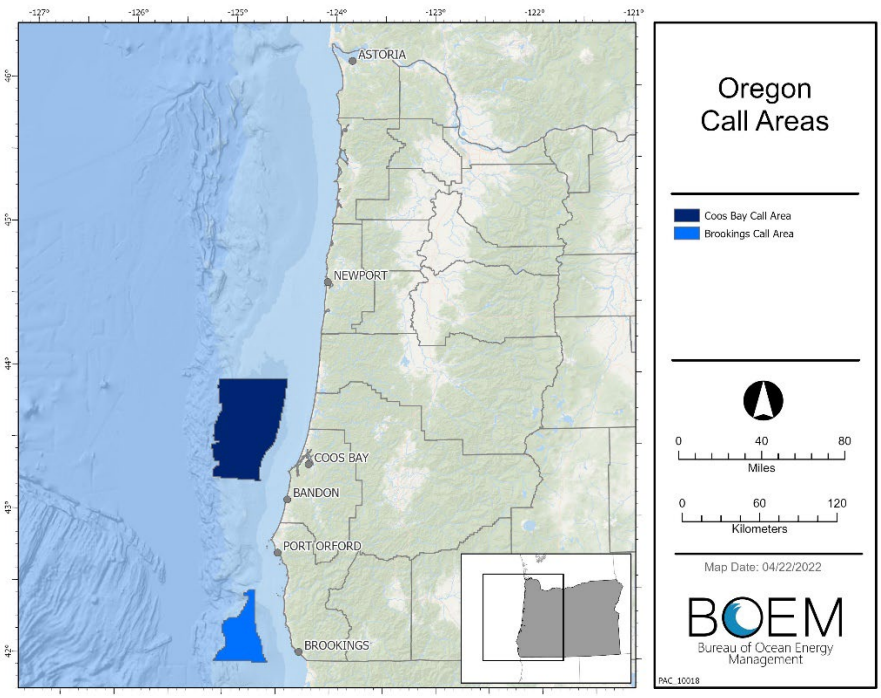

Figure 3: Oregon Call for Information and Nominations Areas.

4. *Development of the Oregon Draft WEAs*

For purposes of identifying the Draft WEAs, BOEM considered the following non-exclusive information sources:

- Comments and nominations received on the Call for Information and Nominations
- BOEM Oregon Intergovernmental Renewable Energy Task Force meetings
- Data Gathering and Engagement Plan for Offshore Wind Energy in Oregon[3]
- Data Gathering and Engagement Summary Report: Oregon Offshore Wind Energy Planning[4]
- Input from state and Federal agencies
- Comments received via consultation meeting and written comment from federally recognized Tribes
- Comments from Tribal outreach meetings with federally recognized Tribes
- Comments from relevant ocean users and stakeholders, including the maritime community, environmental NGOs, offshore wind developers and the commercial fishing industry
- State clean energy goals
- Domestic and global offshore wind market and technological trends
- OROWindMap data and information[5]

[3] https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/BOEM-OR-OSW-Engagement-Plan.pdf. Last accessed March 15, 2023.
[4] https://www.boem.gov/sites/default/files/documents//Data%20Gathering%20and%20Engagement%20Report%20OR%20OSW%20Energy%20Planning%20January%202022.pdf. Last accessed March 15, 2023.
[5] https://offshorewind.westcoastoceans.org/. Last accessed March 15, 2023.

BOEM received comments requesting increased transparency in the Area Identification (Area ID) process and consideration of leveraging an existing ocean planning model previously used in Southern California and the Gulf of Mexico for NOAA's Aquaculture Opportunity Area Atlases and the BOEM Gulf of Mexico and Central Atlantic Renewable Energy Area ID processes. In response, BOEM modified the Area ID process in a Notice to Stakeholders, which is available at https://www.boem.gov/newsroom/notes- stakeholders/boem-enhances-its-processes-identify-future-offshore-wind-energy-areas. This modified process is being used to support identification of Draft WEAs in Oregon (Figure 4).

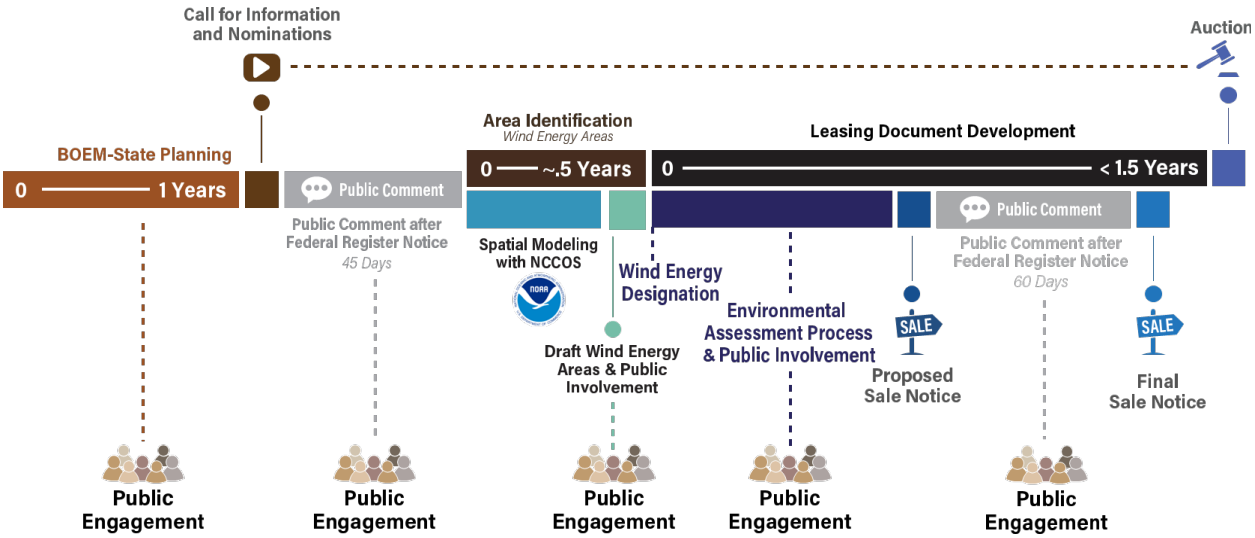

Figure 4: BOEM's leasing process

a. Ocean Planning

BOEM's process to identify Draft WEAs in Oregon was based on rigorous science with the goal of encouraging an informed, forward-looking, and sustainable wind energy industry that maximizes its operational efficiency and limits potential adverse interactions with other industries or natural resources. Additionally, BOEM used a suitability model to identify Draft WEAs in the Federal waters offshore Oregon. Due to several years of outreach and the creation of the OROWind Map tool, BOEM and DLCD were able to collect over 500 data sets to use in the ocean modeling tool.

BOEM identifies Draft WEAs based on the best available science and through public engagement to facilitate wind energy development; support environmental, economic, and social sustainability; and minimize resource use conflicts. To support the Area ID Process, BOEM is using the NCCOS suitability model. This tool is used to understand ocean ecosystems and the interactions of human uses and natural resources. This tool provides a mathematical calculation that is understandable, with minimal bias to support siting decisions. The tool uses several data layers, a model structure, and other factors to calculate a unique suitability score for each grid cell within a study area. The model identifies the grid cells with the highest scores and then develops heat maps that identify areas of relative suitability and conflict.

b. Study Area

On April 27, 2022, BOEM published a Call for Information and Nominations to assess commercial interest in and obtain public input on potential wind energy leasing activities in Federal waters off the coast of Oregon. The two Oregon Call Areas, consisting of 1,159,298 acres and shown in Figure 3, were used to define the NCCOS suitability model study area boundaries.

c. WEA Planning

BOEM's ocean planning processes follows a standard workflow: 1) identification of the planning objective; 2) inventory of data; 3) geospatial analysis of data; 4) interpretation of results; and 5) delivery of map products and reports to decision makers and ocean users. BOEM uses spatial data to represent known or potential environmental and ocean space use conflicts that could constrain, or conditionally constrain, the siting of offshore wind facilities in Federal waters. Using a multi-criteria decision analysis approach allows for evaluating numerous spatial data layers across diverse ocean uses.

In incorporating the NCCOS modeling effort, the data are incorporated into a spatially explicit model to identify areas that may be suitable for offshore wind development. Additionally, natural and cultural resources, industry and operations, various fishing activities, wind logistics, economics, and national security are described and identified in the WEA model suitability analysis, which is discussed in detail in the draft BOEM/NCCOS Joint Report, "A Wind Energy Area Siting Analysis for the Oregon Call Areas," which can be found at: www.boem.gov/oregon. WEA siting informed by ocean planning is helpful in avoiding and minimizing adverse environmental, social, and existing user interactions. Existing datasets were used to have focused discussions with specific ocean users and receive early feedback.

d. Ocean Planning Model

In BOEM's Area ID process, the identification of WEAs requires an understanding of the relationship between different elements of the environment and ocean uses, as well as the practical requirements for offshore wind development. Developing a suitability model for Oregon requires compilation and analysis of best-available data. The Team developed a step-by-step approach for ocean planning using a logical workflow that began with framing the research questions (i.e., number of acres needed for a wind facility), data collection and inventory, then continued with spatial suitability modeling, identifying Draft WEA options using a unique precision suitability modeling strategy, further characterization of options, and finally, interpretation of results (Figure 5). Each step of the workflow diagram corresponds to an essential step of the study, with corresponding methods detailed in the "A Wind Energy Area Siting Analysis for the Oregon Call Areas" draft report.

The Team based its geospatial analysis for identification of Draft WEA options on a categorical framework to ensure relevant, comprehensive data acquisition and characterization for spatial suitability modeling. The Team developed an authoritative spatial data inventory that included data layers relevant to national security, natural resources, industry and operations, fisheries, and wind logistics, e.g., wind speed, distance to port, or water depth. With over 400 data layers included in this analysis, the maps, models, and descriptions provide the most comprehensive marine spatial modeling performed in Oregon to date. Refer to the draft report entitled, "A Wind

Energy Area Siting Analysis for the Oregon Call Areas," for a complete description of the suitability modelling methods and results.

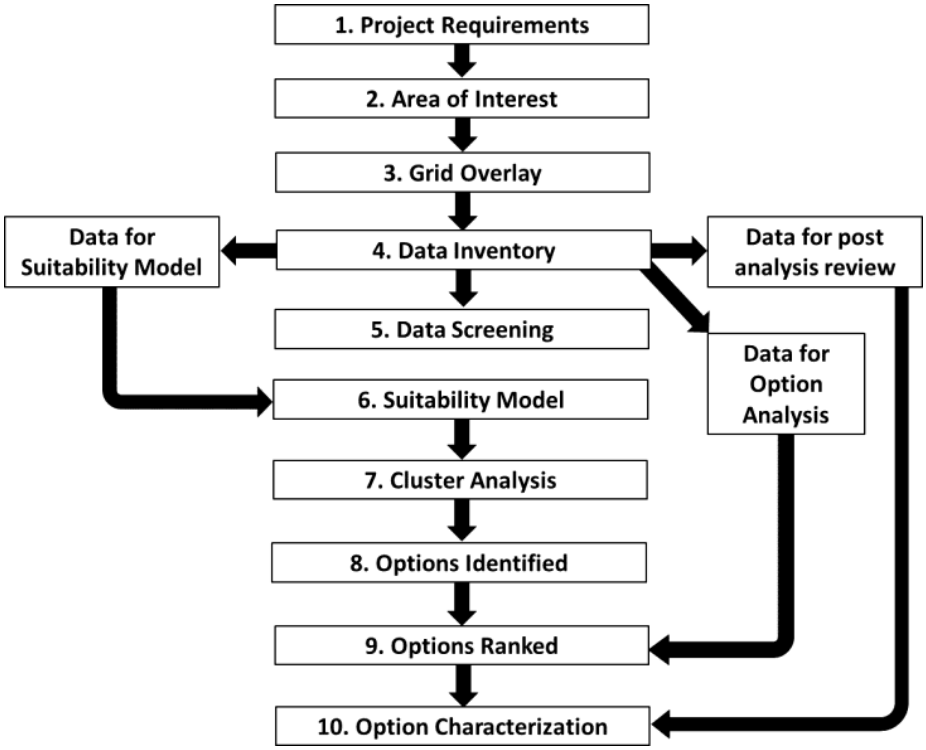

Figure 5: Workflow for Draft Wind Energy Area options spatial analysis

e. Geospatial Data

Collection and processing of spatial data is a key factor in model success, because it is the basis for further calculations and analysis.[6] An initial review was completed to determine the broad suite of data and categories needed to properly support this ocean planning process. The data holdings were developed through engagement with non-governmental organizations and U.S. Federal and state agencies representing a diverse array of stakeholders and Tribal Nations. Many studies were leveraged through the MarineCadastre[7] and OROWindMap, including datasets created for the BOEM Environmental Studies Program. Overall, over 400 data layers were acquired during data inventory.

i. Data processing and setbacks

While some datasets were provided in a ready-to-use format, many datasets required processing prior to use in the suitability model, and subsequent cluster analysis. Methods the Team used to process data are described for all data that required processing in "A Wind Energy Area Siting Analysis for the Oregon Call Area." The Team received much of the data in a ready-to-use

[6] Molina JL, Rodríguez-Gonzálvez P, Molina M-C, González-Aguilera D, Balairon L., Espejo Almodóvar F, Montejo J. 2013. River morphodynamics modelling through suitability analysis of geomatic methods. In: Wang Z, Lee JHW, Gao J, Cao S, editors. Proceedings of the 35th IAHR World Congress, Chengdu, China. Beijing: Tsinghua University Press.

[7] MarineCadastre (MC). 2021. NOAA Office for Coastal Management and BOEM. MarineCadastre.gov Data Registry. Charleston, SC. Available from: https://marinecadastre.gov/data/.

format and reviewed the processing metadata provided by the data originator. Setback distances (i.e., buffers) were applied using conservative professional judgment when an established setback requirement was not available from an authoritative source.

ii. Suitability analysis

The Team performed a gridded relative suitability analysis, a method commonly used in a multi-criteria decision analysis, to identify the grid cells with the highest suitability for Draft WEA development in the Call Areas. Spatial data layers included in the suitability analysis identify space-use conflicts and environmental constraints, such as active national security areas, maritime navigation, ocean industries and natural resource management. A submodel structure was used to capture ocean use and conservation concerns including industry and operations, natural resources, fisheries, and wind logistics. Data layers with no compatibility with wind energy development (e.g., Department of Defense exclusion layers) were captured in the list of incompatible constraints and removed from further analysis due to known incompatibility with wind energy (Figure 6). This submodel structure ensures that each submodel is given equal weight in the final suitability model regardless of how many data layers are present in each submodel.

Figure 6: Overview of relative suitability model design and the submodel components. The constraints submodel includes all data layers with a score of 0.

iii. BOEM data scoring

The Team analyzed categorical datasets (i.e., in which data are distinct and separate groups) to determine if a constraining feature was present or absent in each grid cell. If a feature was absent, a score of 1 was given indicating potential suitability with offshore wind energy development, otherwise a score ranging from 0 to 1 was assigned (0 = unsuitable with offshore wind energy development; 1 = being more suitable with offshore wind energy development).

The most conservative setback distances were used to avoid interactions with other ocean activities (Table 1 and Figure 7). Constraints are reflected in data layers identifying areas of reduced compatibility (e.g., shipping fairways and DoD exclusion areas in 57.59% of the Call Areas.)

Data Layer	Score (0-1)	Percent Area Constrained
Department of Defense – Exclusion Area	0	49.27%
Pacific Coast Port Access Route Study (PACPARS)	0	18.10%
All Constraints		57.59%

Table 1: Constraints submodel data layers included in the relative suitability analysis. Each dataset in the constraints submodel was scored 0 for complete avoidance.

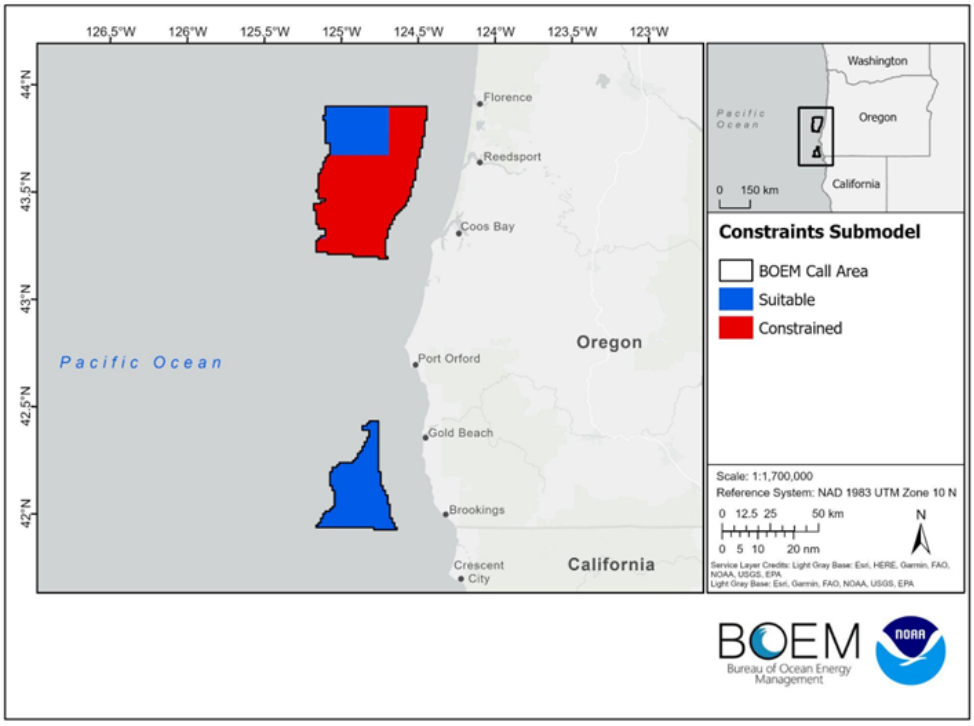

Figure 7: Constraints submodel relative suitability for the Call Area. Red color indicates those areas constrained by ocean activity, while blue areas are considered potentially suitable for offshore wind development.

iv. Final suitability

The Team calculated a final suitability score for each submodel by taking the geometric mean of all scores within each grid cell. We used the geometric mean of all submodels to calculate a final overall suitability score. We chose the geometric mean, because it grants equal importance to each variable.[8] All data layers and submodels had equal weight within the suitability model. The final suitability results for all submodels are presented in Figure 8.

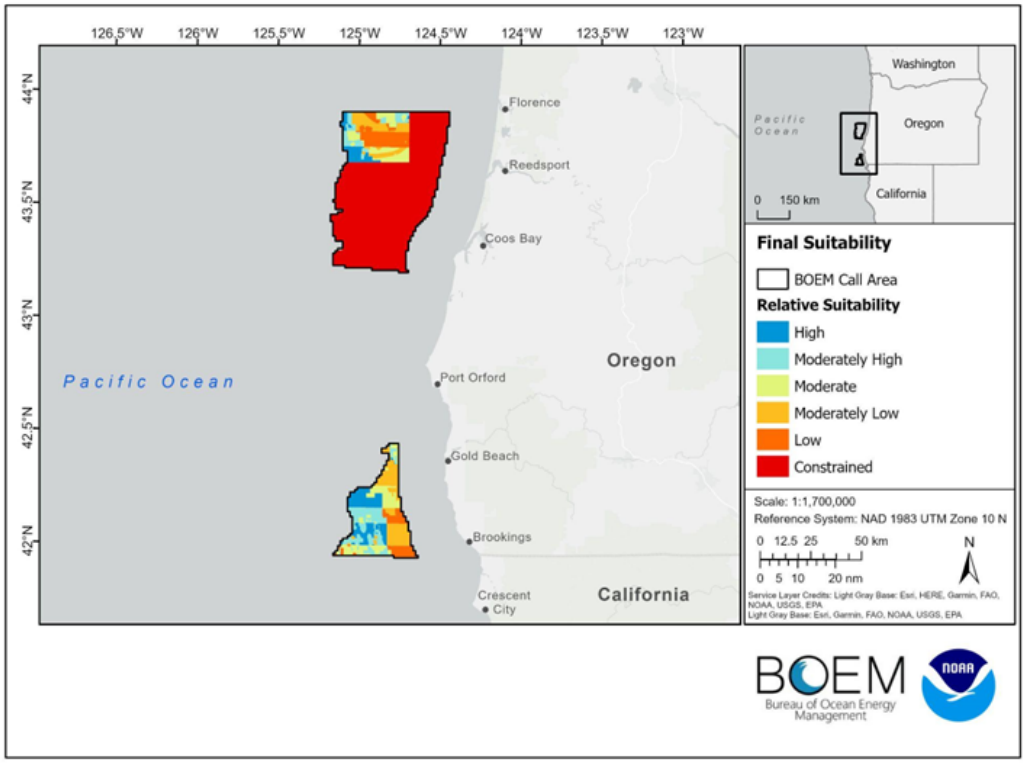

Figure 8: Final suitability modeling results for the Call Area. Red color indicates those areas where layers with a score of 0 occurred due to conflict with ocean activity. Green/blue color indicates areas of highest suitability for offshore wind development.

[8] Bovee KD. 1986. Development and evaluation of habitat suitability criteria for use in the instream flow incremental methodology. Instream Flow Information Paper 21, Report 86(7), U.S. Fish and Wildlife Service.
Longdill PC, Healy TR, Black KP. 2008. An integrated GIS approach for sustainable aquaculture management area site selection. Ocean Coastal Manage. 51(8–9): 612–624.
Silva C, Ferreira JG, Bricker SB, DelValls TA, Martín-Díaz ML, Yáñez E. 2011. Site selection for shellfish aquaculture by means of GIS and farm-scale models, with an emphasis on data poor environments. Aquaculture. 318(3-4):444–457.
Muñoz-Mas R, Martínez-Capel F, Schneider M, Mouton AM. 2012. Assessment of brown trout habitat suitability in the Jucar River Basin (Spain): Comparison of data-driven approaches with fuzzy-logic models and univariate suitability curves. Sci Total Environ. 440:123–131.

The Team performed a Local Index of Spatial Association (LISA) analysis, which identifies statistically significant clusters and outliers of the final relative suitability modeling results. The LISA analysis identified clusters that are statistically significant from other cells at a 95% confidence interval ($p < 0.05$). The cluster analysis identified 208,650 acres of High-High clusters, which are groups of cells with high values that are statistically significant from other cells (Figure 9). Aliquots that overlapped with a high-high cluster were selected, and areas less than 55,000 acres were removed, resulting in a total of 617 aliquots selected. Additional aliquots were included that were fully encircled by the selected aliquots, including four aliquots in Draft WEA A totaling 1,420 acres, and two aliquots in Draft WEA B totaling 710 acres.

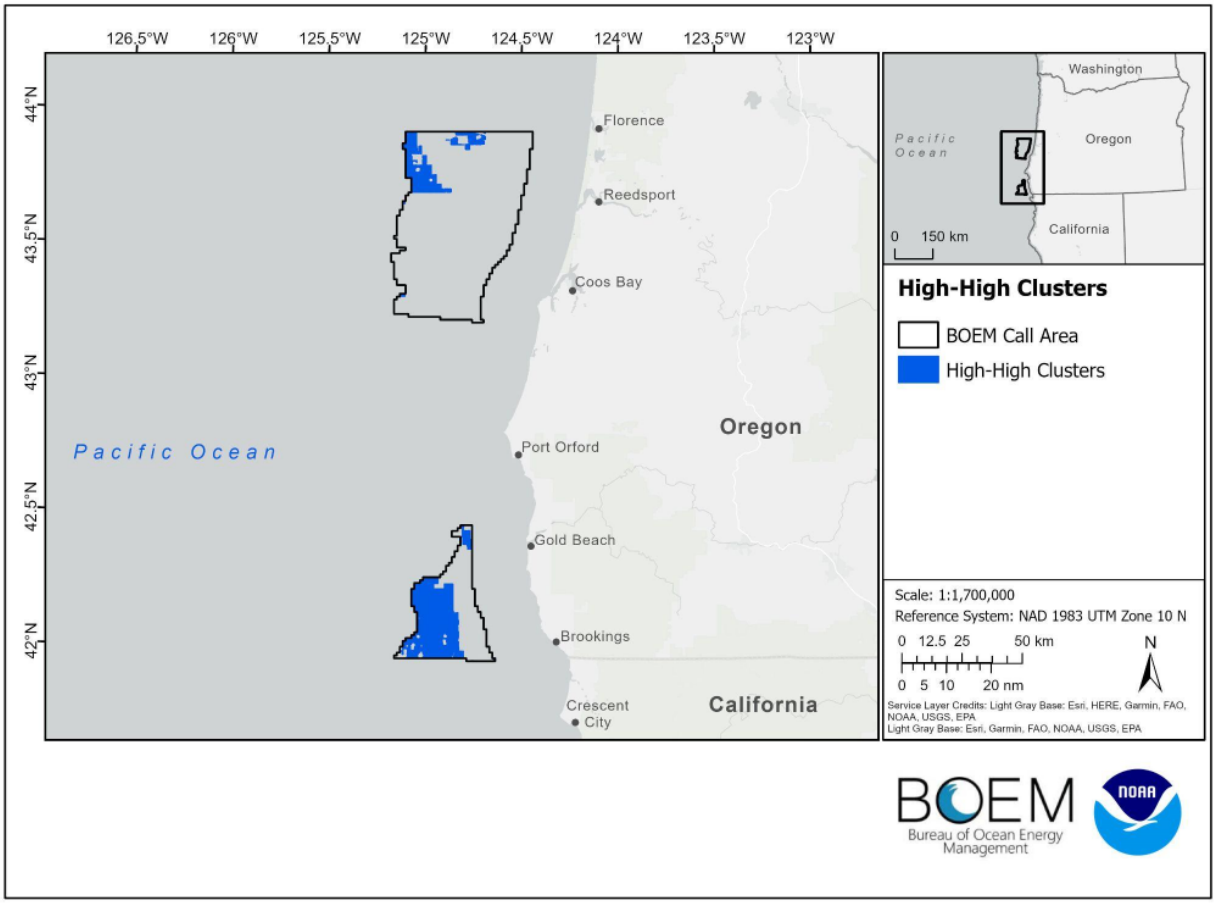

Figure 9: Cluster analysis of the Call Area at the 95% Confidence Interval ($p = 0.05$). These areas represent clusters of grid cells with the highest suitability (i.e., High-High clusters).

v. Draft WEA options recommended by spatial modeling

The Team overlaid the High-High clusters with the lease block aliquots. An aliquot is 1/16th the size of a lease block (1 lease block = 16 aliquots) and is the smallest area that BOEM leases. The Team selected and extracted aliquots that overlapped the High-High clusters, for a total of 617 aliquots, totaling 219,568 acres.

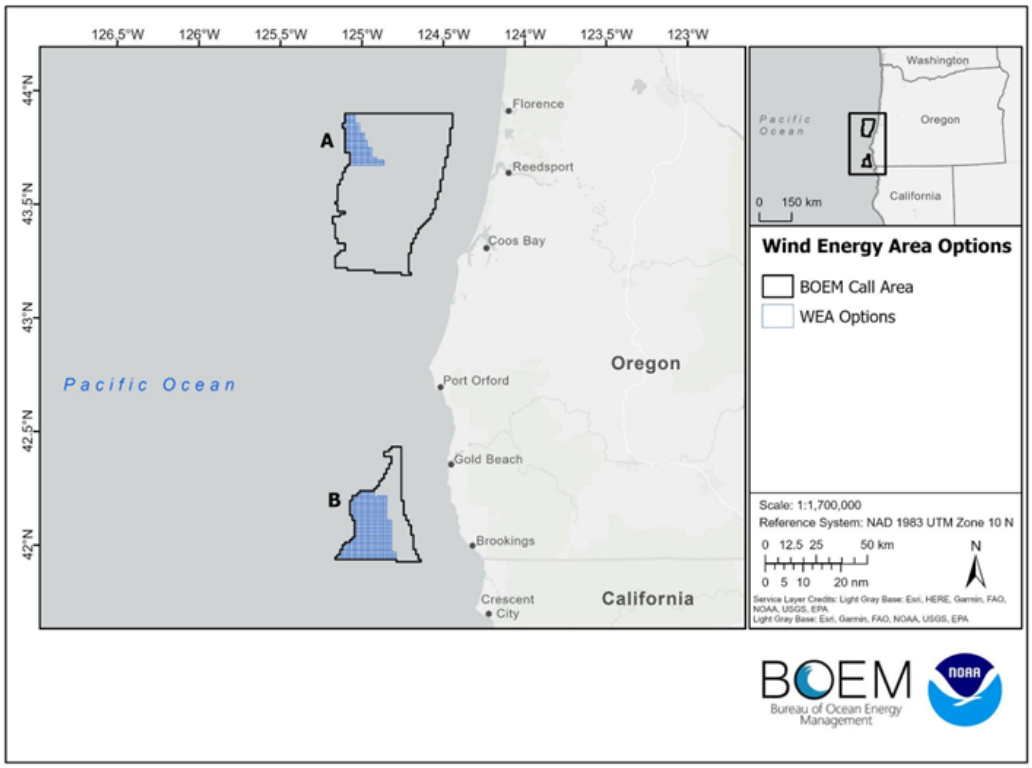

Figure 10: WEA options determined by selecting aliquots that overlapped high-high cluster areas. Overall, 617 aliquots were selected, totaling 219,568 acres.

5. *BOEM Identification of Draft WEAs*

Based on the cluster analysis and using the results provided by the Team's siting model, BOEM identified two potential Draft WEAs, WEA A in Coos Bay at 61,204 acres and WEA B in Brookings at 158,364 acres (Figure 10), for a total of 219,568 acres. The total area of the Draft WEAs represents an 81.06% reduction of the Call Areas. The Draft WEAs have a combined capacity of 2.6 GW, which is less than the State of Oregon's offshore wind planning goal of 3 GW. Additional future reductions to these areas are still possible and may further reduce BOEM's ability to provide the State with sufficient area to meet this planning goal.

a. WEA – A

BOEM identified one Draft WEA ('A', Figure 10) in the Coos Bay Call Area totaling 61,204 acres, or 248 square kilometers. Draft WEA - A could support up to 743 MW of floating offshore wind energy. Draft WEA – A is approximately 40.68 miles northwest of the Port of Coos Bay, Oregon. The mean depth across the entire option is 1,178 meters with a maximum depth of 1,414 meters and a minimum of 635 meters. BOEM received two overlapping wind energy industry nominations (Figure 11). Potential spatial and environmental conflicts identified in Area A include preliminary USCG navigational safety fairways, Department of Defense activities, National Marine Fisheries Service (NMFS) fisheries scientific surveys, commercial fishing, a submarine cable, and natural resources, including presence of protected species, marine birds, rocky reef groundfish habitat, methane bubble streams, a continental shelf break setback, and the modeled presence of deep-sea corals.

b. WEA – B

BOEM identified one Draft WEA ('B', Figure 10) on the western side of the Brookings Call Area totaling 158,364 acres or 641 square kilometers. Draft WEA – B could support up to 1,922 MW of floating offshore wind energy. Draft WEA – B is approximately 23.57 miles west of the Port of Brookings Harbor, Oregon. The wind energy industry expressed interest in several areas throughout Area B particularly within the western region (Figure 11). Potential spatial and environmental conflicts identified in Area B include NMFS fisheries scientific surveys, commercial fishing, and natural resources, including presence of protected species, marine birds, and habitats, including Essential Fish Habitat Conservation Areas, methane bubble streams and the modeled presence of deep-sea coral.

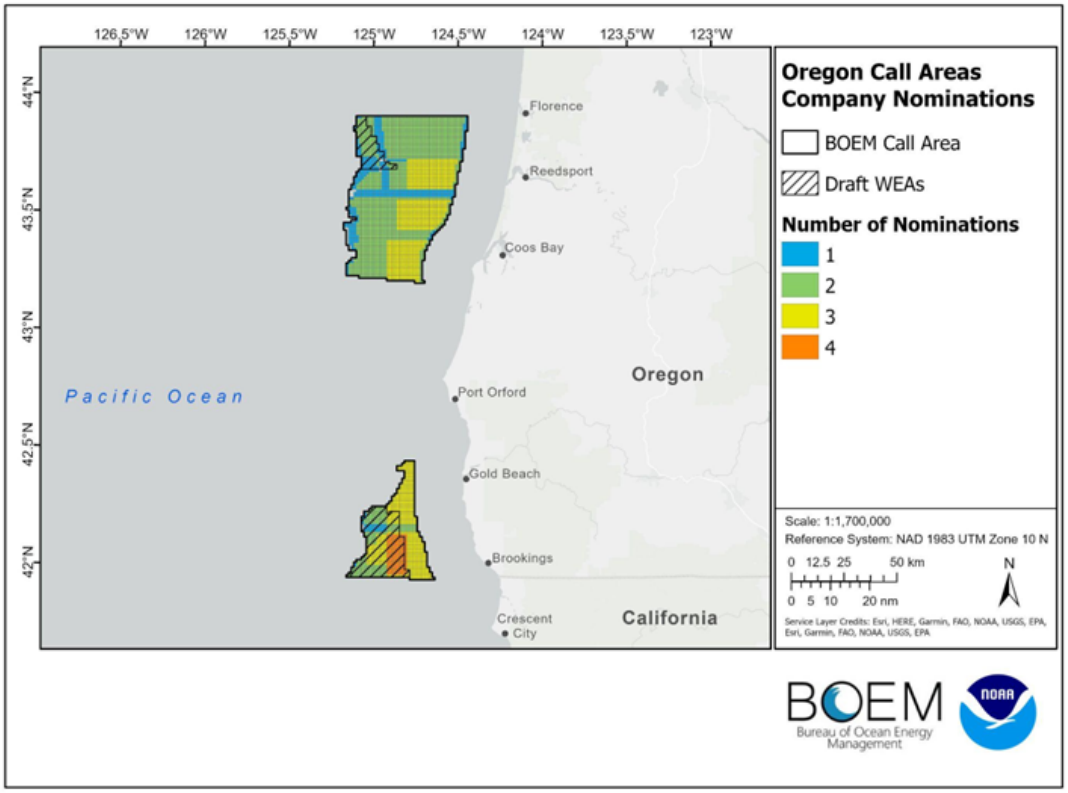

Figure 11: Areas receiving wind energy industry nominations in response to the Oregon Call for Information and Nominations.

6. Next Steps

BOEM is accepting written public comments on the Draft WEAs for 60 days following the publication of this announcement. Search for docket number BOEM-2023-0033 at https://www.regulations.gov/ to submit a comment. BOEM will also accept comments via mail as directed in the "Addresses" section of this notice. BOEM will consider written public comments, along with those received at all public engagement meetings during the development of the Final WEAs. For more information on the public meetings, visit www.boem.gov/renewable-energy/state-activities/Oregon. BOEM will consider information received in response to this notice to identify Final WEAs as part of the Area Identification (Area

ID) process. The analysis and rationale used to develop Final WEAs offshore Oregon will be published.

7. Environmental Review

Before deciding whether leases may be issued, BOEM will prepare an environmental assessment (EA) under NEPA analyzing the Final WEAs (including public comment periods to determine the scope of the EA and to review and comment on the draft EA). The EA will analyze anticipated impacts from site characterization and assessment activities expected to take place after leases are issued. Site characterization activities include geophysical, geotechnical, archaeological, and biological surveys; site assessment activities include installation and operation of meteorological buoys. BOEM also will conduct appropriate consultations with Federal agencies and Tribal, state, and local governments during development of the EA. These consultations include, but are not limited to, those required by the Coastal Zone Management Act, the Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act, Section 106 of the National Historic Preservation Act (NHPA), and Executive Order 13175, which is entitled, "Consultation and Coordination with Indian Tribal Governments."

Before BOEM allows a lessee to begin construction of a wind energy project, BOEM will consider the potential environmental effects of the construction and operations of any proposed wind energy facility under a separate, project-specific NEPA analysis. This analysis will include additional opportunities for public involvement and consultations with appropriate Federal agencies, Tribes, the State of Oregon, and local governments.

8. Proposed and Final Sale Notices

If BOEM decides to offer an area(s) for lease, BOEM would publish a Proposed Sale Notice (PSN) describing the proposed area(s) for competitive leasing, the associated terms and conditions, and a proposed format of the competitive auction issued pursuant to 30 C.F.R. § 585.216. The PSN would be followed by a 60-day formal comment period, which helps to inform the Final Sale Notice. BOEM may use information from the NEPA analysis for any lease sale, as well as information gathered in response to the PSN, to further refine lease areas and develop lease terms and conditions. BOEM would publish a Final Sale Notice (FSN) at least 30 days before the date of the sale that would describe the final lease terms and conditions for the area(s) offered for lease and would also describe the format of the competitive auction.

9. Requested Information from Interested or Affected Parties

BOEM requests comments regarding the following features, activities, mitigations, or concerns within or around the Draft WEAs. Commenters should be as specific and detailed as possible to help BOEM understand and address the comments, including indicating if your comment pertains to a particular Draft WEA.

a. Geological, geophysical, and biological bathymetric conditions (including bottom and shallow hazards and whether seafloor is known to be covered with living organisms).
b. Known archaeological and cultural resource sites on the seabed.

c. Information regarding the identification of historic properties or potential effects to historic properties from leasing, site assessment activities, or commercial wind energy development in the Draft WEAs. This includes potential offshore archaeological sites or other historic properties within the areas described in this notice and onshore historic properties, including Traditional Cultural Places (TCPs) that could potentially be affected by renewable energy activities within the Draft WEAs. This information will inform BOEM's review of future undertakings under section 106 of the NHPA and NEPA.
d. Information, particularly spatial data, about potentially conflicting uses of the Draft WEAs, including navigation (in particular, commercial shipping and recreational vessel use), recreation, and fisheries (commercial and recreational). Additional information regarding recreational and commercial fisheries including, but not limited to, the use of the areas, the types of fishing gear used, seasonal use, and recommendations for reducing use conflicts.
e. Several comments in response to the Call for Information and Nominations requested BOEM complete preliminary visual simulations of offshore wind facilities to understand potential future impacts to viewsheds and areas of cultural significance. These simulations can be viewed online at: www.boem.gov/renewable-energy/state-activities/Oregon. BOEM also requests additional information relating to visual resources and aesthetics, the potential impacts of wind turbines and associated infrastructure to those resources, and potential strategies to help mitigate or minimize any visual effects.
f. Information on the constraints and advantages of possible electrical cable transmission routes, including onshore landing and interconnection points for cables connecting offshore wind energy facilities to the onshore electrical grid and future demand for electricity in the Pacific Northwest.
g. Habitats that may require special attention during siting and construction.
h. Information regarding the identification of protected species, federally designated (or proposed) critical habitat, essential fish habitat, or areas that are environmentally sensitive or crucial to marine productivity and/or are State or federally managed for their conservation value.
i. Other relevant socioeconomic, cultural, biological, and environmental data and information.